Online Travel Reviews on Mobile Applications when making travel plans: Uses and Gratifications perspectives

Luiz Mendes-Filho\textsuperscript{a}, Cynthia Corrêa\textsuperscript{b}, and Miriam Mangueira\textsuperscript{b}

\textsuperscript{a}Department of Tourism
Federal University of Rio Grande do Norte, Brazil
luiz.mendesfilho@gmail.com

\textsuperscript{b}School of Arts, Sciences and Humanities
University of Sao Paulo, Brazil
cynthia.correa@outlook.com, mangueira@usp.br

Abstract

From the improvement of Web 2.0, users become empowered and motivated to share comments about experiences related to products and services. User-Generated Content (UGC) represents a major source of travel information, helping tourist to make a decision. On the other hand, the phenomenon of the popularity of mobile devices has also a significant effect on travel and tourism. Considering this panorama, the paper’s purpose is to understand how travellers use Online Travel Reviews (OTR) on mobile apps for planning trips, based on Uses and Gratifications perspectives. In the survey, a matching quiz was applied to 85 tourists during the 2014 FIFA World Cup in Sao Paulo city were examined. The study results provide empirical support for the proposed research model, suggesting that content gratifications and process gratifications influences attitude to use OTR.

Keywords: Online Travel Reviews; Mobile applications; Uses and Gratifications Theory; Travel plans.

1 Introduction and Theoretical Background

The statement of Web 2.0 as an interactive and informational platform results in the empowerment of users that allows two-way information communications in travel and tourism (Ye, Law, Gu, & Chen, 2011). As the Internet structure has become the vital source of information for the majority of travellers, User-Generated Content (UGC) is a key source of travel information and decision-making in today’s market. Regarding the opportunities offered by emerging Web technologies, travelers’ behaviour vis-à-vis information search and travel planning is altering drastically (Ayeh, Au, & Law, 2013). Consequently, UGC has been considered essential for planning trips, and Web users make comments in a large variety of forms such as photos, videos, podcasts, ratings, articles and blogs (Mendes-Filho, Tan, & Mills, 2012). In this context, many studies with different approaches have been developed founded on UGC in travel and tourism (Ayeh et al., 2013; Cox, Burgess, Sellito, & Buultjens, 2009; Mendes-Filho et al., 2012; Simms & Gretzel, 2013; Ye et al., 2011). Therefore, it is evident how Web 2.0 and UGC have been increasingly changing the manner that people search, find, gather, share, and consume information (Ye et al., 2011). On the other hand, it is necessary to observe the diffusion of mobile applications (apps) among travellers to search and share UGC. The popularity of mobile devices has significant implications for the travel sector. Related to the mobile apps market, travel apps are the eight most
popular being downloaded in 2014 (ETC, 2014). Observing the effects of UGC on the mobile market, this research aims to understand how travellers use Online Travel Reviews (OTR) on mobile apps when making travel plans, according to the perspectives of Uses and Gratifications (U&G) theory. OTR refers to a review posted on the Internet by someone who has experienced the travel destination, product or service that the review is made about. For the survey, a matching quiz was answered by 85 tourists visiting the city of Sao Paulo during the 2014 FIFA World Cup were examined. The U&G perspectives have been constituted an adequate approach for the study of Internet (Leung, 2003; Luo, Chea, & Chen, 2011; Parker & Plank, 2000; Ruggiero, 2000; Stafford, Stafford, & Schkade, 2004). Besides, U&G assume that the appropriate media and their messages can gratify the diversity of social and psychological needs. Social psychological origins of needs, values, and beliefs give rise to motives for behaviour, which may be guided by social circumstances into seeking gratifications through the consumption of media (Leung, 2003).

2 Methodology

The technique chosen to test the research model was a field study, instrumented via quiz. Thus, a survey of tourists who used any form of OTR on mobile apps for planning trips was performed. Self-administered surveys were distributed to tourists during the 2014 FIFA World Cup, in the period from 19 June to 12 July, in tourist information centers and at FIFA Fan Fest in Anhangabau valley, in Sao Paulo city. A total of 85 responses were deemed usable for data analysis. The largest amount of respondents was between 26-34 years old (42.3%), followed by 18-25 years old (36.5%); the majority of tourists were undergraduate (62.3%) and postgraduate (26%) students. Nineteen nationalities were represented with the largest proportions coming from Brazil (34.1%), Argentina (14.1%), Germany (8.2%), Colombia (6.0%), Spain and Chile (both with 4.7%). The most popular mobile apps used to read OTR were TripAdvisor.com (92.9%), Booking.com (72.9%), and LonelyPlanet.com (43.5%).

The research model was tested using Partial Least Squares (PLS), a technique for structural modeling that is suitable due to its reputation for robustness in handling small sample sizes (Straub et al. 2002). PLS Graph v3.0 was used to assess both measures of properties and relations specified in the structural model. The paths within the structural model were established by evaluating the research model in PLS that allows assessing if there are relationships among the constructs representing social gratifications, process gratifications, content gratifications, attitude, and intention to use OTR. These five contracts were assessed using a seven-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree). There were three items (questions) for each contract. The questions not only were sourced from validated instruments, but also modified to focus on the use of OTR on mobile apps for travel planning. See below (Table 1) an example for each item representing the construct. To estimate the significance of path coefficients and test validity of the constructs, a bootstrapping technique to generate 200 samples of 85 data points each was used.

Table 1. Constructs measures
Construct | Item | Source
--- | --- | ---
Social | Based on the review rating, the OTR on mobile apps were highly rated by other online travellers | Cheung, Luo, Sia, & Chen (2009)
Process | OTR on mobile apps are very important to help me make my travel plans | Stafford et al. (2004)
Content | Using OTR on mobile apps when I make my travel plans is pleasant | Davis, Bagozzi, & Warshaw (1992)
Attitude | Using OTR on mobile apps when I make my travel plans is a good idea | Taylor & Todd (1995)
Intention | I intend to use OTR on mobile apps the next time I make my travel plans | Taylor & Todd (1995)

3 Results

The PLS analysis involve two stages: the measurement model is tested to ensure the constructs have sufficient psychometric validity, and the structural model is then assessed through the path coefficients and the $R^2$ values. The adequacy of the model was assessed by examining the reliability and validity of the measurement used to evaluate the constructs (Chin, 2010). Item loadings for the constructs, that is, social gratifications (0.787, 0.921, and 0.918), process gratifications (0.873, 0.860, and 0.838), and content gratifications (0.936, 0.951, and 0.933), attitude (0.929, 0.858, and 0.870), and intention (0.876, 0.901, and 0.894) are considered adequate for the assessment of the measurement model. The results reveal Composite Reliabilities (CR) ranging from 0.893 to 0.958, exceeding the recommended threshold value of 0.707 (Nunnaly & Bernstein, 1994), and, construct Average Variance Extracted (AVE) ranged from 0.771 to 0.884. Convergent validity is adequate when constructs exhibit an AVE of 0.50 (Fornell & Larcker, 1981). These results confirm that the constructs were realiable and valid. Also, the PLS analysis estimated the path coefficient of the research model. Figure 1 presents the path coefficients for each relationship, and the variance explained for each dependent variable. Results showed that most path coefficients was significant at a $p < .01$ level. A good fit model is established where there are significant path coefficients, acceptably high $R^2$, and internal CR of constructs (Gefen, Straub & Boudreau, 2000). The results presented by Figure 1 shows that the data fairly fit the model.

![Fig. 1. The results](image-url)
Except for the path from social gratifications to attitude, all path coefficients specified in the model (shown in Figure 1) are significant, thus satisfying both the conservative criteria and the suggested lower threshold for significance. The model explains a significant amount of variation in the dependent variable, intention to use OTR on mobile apps when making travel plans ($R^2 = 0.33$). Attitude ($\beta = 0.57$, $p < 0.001$) had a significant influence on intention to use OTR on mobile apps accounting for 33.2% of the variance in intention. This is consistent with previous research that showed the attitude as an important determinant of behaviour related to tourism (Ayeh et al., 2013). The PLS analysis for attitude ($R^2 = 0.65$) found two motives that positively predict attitude to use OTR: content gratifications ($\beta = 0.48$, $p < 0.001$), and process gratifications ($\beta = 0.31$, $p < 0.01$). This finding is theoretically consistent with the expectation that online travellers will be motivated to use OTR on mobile apps for content gratifications and process gratifications (Stafford & Stafford, 2001). According to U&G research (Stafford & Stafford, 2001), people use media either for the content carried by the medium (such as entertainment), or for the simple experience of the media usage process (for example, using smartphones). These two constructs are characterised as content gratifications and process gratifications. Therefore, online travellers may be motivated by enjoyment of the usage processes of OTR websites on mobile apps when making travel plans, as well as online travellers may be motivated by the desire for using mobile technologies to make travel plans. On the other hand, the expectation that online travellers would be motivated by social uses and gratifications was not confirmed.

4 Conclusions and implications

The findings provide a preliminary test of viability of the research model within the context of OTR on mobile apps using U&G theory. Prior studies have not considered the role of U&G theory through use of OTR on mobile apps as one of the key context-relevant beliefs influencing traveller attitude and intention. The study results provide empirical support for the research model, suggesting that content gratifications and process gratifications influences attitude to use OTR. Thus, U&G theory looks well suited for examining Internet use in a customer context (Luo et al., 2011).

This study yields three implications for research. First, it contributes to a broader understanding of the U&G theory in the context of OTR on mobile apps when making travel plans. Second, the results illustrate an example of how online travellers may be motivated by enjoyment of the usage processes of OTR on mobile apps, and how online travellers may be motivated by the desire for using mobile apps to make travel plans. Third, the outcomes from this pilot study might be useful to service providers in the travel sectors. For example, the model would help them understand that the content and process gratifications of using OTR on mobile apps ultimately influence consumer decision-making.

PLS is a useful analysis tool given the use of relatively small sample of 85 observations. Since these are the preliminary results of a pilot study, findings cannot be generalised until the actual data collection is carried out. The study discussed in
this paper is still underway. The next phase of this research is to take lessons learned in this study, and perform primary data collection.

References


